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ABSTRACT

This annotated bibliography, listing sources which trace the history of vocational education from the early 20th century to the close of 1966, is divided into three parts: (1) books and monographs, (2) periodical articles, and (3) doctoral dissertations. Citations contained in each of the three parts are arranged alphabetically and include materials developed from 1917 through 1966. Individual entries include author, title, place of publication, year, page listing, volume and issue number (for periodicals), and an annotation. Emphasis is placed on vocational education in general and the teaching of vocational and technical education, and is intended for use by teachers, researchers, and administrators. A subject index is included. (GEB)

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OE 80046

VOCATIONAL EDUCATION: An Annotated Bibliography of Selected References, 1917-1966 (Below College)

by Alice Songe

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
John W. Gardner, *Secretary*
OFFICE OF EDUCATION, Harold Howe II, *Commissioner*

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FOREWORD

This bibliography lists and describes pertinent sources which trace the history of vocational education in the United States from the early 20th century to the close of 1966. These references were chosen so that the teacher, the researcher, and the administrator in the field might gain an insight into the development of this form of education as it has been taught in public schools, private technical institutes, industrial centers, and government sponsored programs. References to such programs as the Civilian Conservation Corps, the Job Corps, and the training of functional illiterates now receiving welfare assistance have been included.

It will be noted that many phases of this subject have not been included. Emphasis is placed on vocational education in general and the teaching of vocational and technical education.

Acknowledgement is made of the valuable advice and guidance offered by many specialists in the Office of Education and elsewhere in the Department. Special thanks are due Mr. Howard K. Hogan who until his recent retirement from the Division of Vocational and Technical Education gave generously from his store of wisdom and knowledge.

WALTER M. ARNOLD,
Assistant Commissioner and Director,
Division of Vocational and Technical Education.

PREFACE

The publication of this work has one major purpose: to furnish pertinent and available sources of information for school personnel responsible for administering Federal, State, and local programs in vocational education below college level.

The annotation following each item attempts to give a brief summary of that work, and in some instances indicates what way one may best use the publication. Particular subjects in this bibliography may be located by using the subject index. Vocational education such as agricultural, home economics, distributive, and commercial training may be found only in the general references. Alphabetically arranged by author, these references also provide a name list of people who have made valuable contributions in the field of vocational education. References to vocational guidance, vocational rehabilitation, and vocational teacher training are not included.

The periodical articles cover generally the last 11 years, 1955–66, in order to embrace the most current opinions. However, the books and doctoral dissertations go back to 1900. Histories of vocational education legislation are to be found in many of the sources quoted. Those congressional documents believed to be vital as primary sources have been included. Annotations are not given for the doctoral dissertations since the titles are explanatory in most cases.

In collecting the references the catalogs of both the Department library and the Library of Congress were examined. This bibliography was compiled by Alice H. Songe, education specialist, under the direction of Charles Gately, associate librarian for readers services.

KANARDY L. TAYLOR,
Department Librarian.

Part I—*BOOKS AND MONOGRAPHS*

AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS. Educational administration in a changing community. Thirty-seventh yearbook. Washington, The Association, a department of the National Education Association, 1959. 221 pp.

A summary of the research on community structures and techniques. A guide for studying the community as a preface to planning and operating effective educational programs, including an effective vocational education program.

AMERICAN ENTERPRISE INSTITUTE. Legislative analysis: the youth employment bill, S. 1, H.R. 1890. Washington, 1963. 21 pp. (88th Cong., 1st sess., AEI report, No. 2, Mar. 14, 1963.)

An analysis of the historical background of this proposal. A summary of the bill's provisions and the importance of the issues concerning unemployed youth.

BARLOW, MELVIN L. Principles of trade and industrial education. Austin, the University of Texas Press, 1963. 150 pp.

A review of the philosophical basis of industrial education and a historical account of such training during the 1906–17 period.

BAWDEN, WILLIAM T. Leaders in industrial education. Milwaukee, Wis., Bruce Publishing Co., 1950. 196 pp.

Chapters are devoted to the work of C. M. Woodward, C. R. Russell, F. G. Bonser, I. S. Griffith, J. D. Runkle, L. D. Harvey, J. H. Stout, W. E. Roberts, and F. T. Struck. A bibliography is included.

BECKER, JOSEPH M. In aid of the unemployed. Baltimore, John Hopkins Press, 1965. 317 pp.

A history and current evaluation of programs to aid the unemployed in the United States. In chapter 2 (pp. 227–250), Gerald Somers reviews public training programs and assesses government and private retraining of the unemployed.

BENNETT, CHARLES A. History of manual and industrial education up to 1870. Peoria, Ill., Manual Arts Press, 1926. 461 pp.

General historical development of labor and learning, beginning with the Greeks and their attitudes toward the mechanical arts. Covers the development of industrial education and schools in Europe and the transfer of these ideas and movements to America. Includes reprints of source material in this field.

———. History of manual and industrial education 1870–1917. Peoria, Ill. Manual Arts Press, 1937.

A continuation of the author's earlier volume. The last five chapters (pp. 310–552) are devoted to education in the United States, with emphasis on the development of shopwork training and manual training in the elementary and secondary school, teacher training, and the vocational education movement.

BENNETT, GUY. Vocational education of junior college grade. Baltimore, Warwick and York, 1928. 244 pp.

The status of vocational training in the junior college in the early 1920's. Useful as a source of statistics (taken from the 1920 census) on occupations pursued by junior college students in each State and the types of training furnished by the institutions surveyed.

BIRCHILL, GEORGE W. Work study programs for alienated youth. Chicago,

Science Research Associates, Inc., 1962. 265 pp.

A casebook describing nine work study programs for secondary students provided by eight public school systems and one private group.

BORROW, HENRY, ed. Man in a world at work. New York, Houghton Mifflin, 1964. 606 pp.

The 50th anniversary of the National Vocational Guidance Association was marked by the publication of this volume. It represents "the profession's best thinking on the nature of vocational guidance, the meaning of the human work experience, the relationship of the individual to the labor force, and research and practice in vocational guidance." Contains papers of 24 contributors in the field.

BRICKMAN, WILLIAM W., ed. Automation, education, and human values, edited by William W. Brickman and Stanley Lehrer. New York, School and Society, 1966. 419 pp.

This work consists of essays by eminent educators and others on the effects of technological change on the home, training received in school, government, the American economy, employment, and use of leisure time.

BROACH, HOWELL H. and JULIA O'CONNOR PARKER. "The experience of labor with trade and industrial education." Appendix A. *In* Vocational Education by John Dale Russell and associates. Staff Study No. 8. Prepared for the Advisory Committee on Education. (Washington, U.S. Government Printing Office, 1938) pp. 241–289.

A special report prepared for the Advisory Committee on Education. Contents: History of labor's attitude up to the passage of the Smith-Hughes Act, changes in attitudes, reasons for dissatisfaction; general criticism by organized labor of vocational education in secondary schools and in industrial plants, labor representation on advisory boards of vocational educational institutions; recommendations; and summary.

BROOKOVER, WILBUR S., and SIGMUND NOSOW. "A sociological analysis of vocational education in the United States." *In* Education for a Changing World of Work. Report of the Panel of Consultants on Vocational Education. Appendix III. (Washington, U.S. Government Printing Office, 1963) pp. 21–52.

A discussion of the relationships between vocational education and social institutions. Topics covered: The social setting of vocational education; contemporary vocational education in the United States; and a conceptual approach to the sociological analysis of vocational education.

BRYAM, HAROLD M., and RALPH C. WENRICH. Vocational education and practical arts in the community school. New York, Macmillan, 1956. 512 pp.

Written primarily as a college text, this book gives emphasis to the role of the community in introducing and maintaining vocational education programs in its schools. Attention is given to the Federal and State laws which enable vocational programs to exist and the means to develop these aids in the community.

CARTWRIGHT, MORSE ADAMS, ed. Unemployment and adult education, a symposium on certain problems of re-education arising from "permanent layoff"—the displacement of men and women in industry through the introduction of machinery and other laborsaving devices sometimes known as technological unemployment . . . New York, American Association for Adult Education, 1931. 63 pp.

Papers and excerpts from the proceedings of this symposium held under the auspices of the American Association for Adult Education in New York, December 18, 1930.

CLARK, HAROLD F. "The economic and social background of vocational education in the United States." *In* Education for a Changing World of Work. Report of the Panel of Consultants on Vocational Education. Appendix III. (Washing-

ton, U.S. Government Printing Office, 1963) pp. 1–17.

Generalizations on various aspects of vocational training as it exists today in the United States. Partial contents: Vocational training by schools, business and industry, the military, and by various agencies and vocational education and training needed by various parts of the population. Six recommendations are given by the author.

CLARK, HAROLD F., and HAROLD S. SLOAN. Classrooms in the factories. Rutherford, N.J., Fairleigh Dickinson University, Institute of Research, 1958. 139 pp.

The subtitle of this report is: "An account of educational activities conducted by American industry." Confined to approximately 500 of the largest American industrial corporations, the study describes the various courses offered and the means used in judging the achievements of those participating in the classes.

COLORADO DEPARTMENT OF EDUCATION. Southwestern States developmental project relating to educational needs of adult agricultural migrants. Calvin Raymond Orr, Project Director. Denver, 1965. 83 pp. (Cooperative research report No. K–005)

A description of the developmental project to assist the adult migrant worker. It was conducted through the cooperation of the chief State school officers of Arizona, Colorado, New Mexico, and Texas and the colleges of education of Arizona State University, University of New Mexico, University of Texas, and Adams State College.

COMMITTEE FOR ECONOMIC DEVELOPMENT. Raising low incomes through improved education; a statement on national policy by the Research and Policy Committee of the Committee for Economic Development. New York, 1965. 51 pp.

A description of some of the improvements and extensions of educational programs to raise the level of productivity and the incomes of many Americans.

CONFERENCE ON UNEMPLOYED OUT-OF-SCHOOL YOUTH IN URBAN AREAS. Social dynamite. (Washington) National Committee for Children and Youth, 1961. 265 pp.

This report includes a listing of the services, programs, and projects in effect that deal with the problems of unemployed youth and a bibliography of references.

DEARBORN, NED H. Once in a lifetime; a guide to the CCC camp. New York, Charles E. Merrill Co., 1936. 308 pp.

Prepared for the CCC camp enrollee, this guidebook offers a detailed account of the organization of the camps, courses offered, and the approach used in motivating the students to greater achievements.

DICKINSON, WILLIAM B., Jr. Retraining for new jobs. Washington, Editorial Research Reports, 1962. 775–792 pp. (Editorial research reports, 1962, v. 2, No. 16, Oct. 31, 1962)

Contents: Need to retrain displaced workers; State and Federal retraining plans; retraining provisions of trade expansion act; obstacles to effective training; and foreign experience with retraining.

"Education and Industry." *In* The Transformation of the School by Lawrence A. Cremin. (New York, Alfred Knopf, 1961) pp. 23–57.

The historical movement in vocational education is described up to and including the passage of the Smith-Hughes Act of 1917.

EDUCATIONAL POLICIES COMMISSION. Manpower and education. Washington, National Education Association, 1956. 128 pp.

This report is devoted to facts concerning the Nation's manpower situation and recommendations for education concerning shortages and underused potentials in American manpower.

EELLS, WALTER C. Present status of junior college terminal education. Washington, American Association of Junior

Colleges, 1941. 340 pp. (Terminal education monograph No. 2)

A report prepared for the Commission on Junior College Terminal Education of the American Association of Junior Colleges. This book describes the eight parts of the vocational curricula predominant in the 610 junior colleges under examination and methods used in creating effective training.

EMERSON, LYNN A. "Technical training in the United States." *In* Education for a changing world of work: Report of the Panel of Consultants on Vocational Education. Appendix I. (Washington, U.S. Government Printing Office, 1963.) 170 pp.

This report is devoted to technical education on semiprofessional levels and its role in providing trained workers for industry, including methods in which workers are prepared to fill jobs available. A survey of the current needs for technicians is given, how these needs are being met, and recommendations for meeting future needs.

EVANS, LUTHER H. and GEORGE E. ARNSTEIN, eds. Automation and the challenge to education. Washington, National Education Association, 1962. 190 pp.

Proceedings of a symposium held in Washington, D.C., January 17–19, 1962, sponsored by the Project on the Educational Implications of Automation of the National Education Association. Twelve representatives of education, economics, political science, labor, and management submitted papers on how education can best answer the challenge of automation.

FERN, GEORGE H. What is vocational education? A series of discourses on various aspects of vocational education. Chicago, American Technical Society, 1944. 159 pp.

Written mainly for the "general educator" to show how vocational education fits into the general curriculum, its purposes, and philosophy.

GARDNER, JOHN W. "From high school to job." *In* Annual Report, Carnegie Corporation of New York, 1959–60. (New York, 1960) pp. 11–20.

What should be done, and what could be done, for that segment of American youth whose formal schooling ends with high school. The discussion includes suggestions for effective "transitional experiences" from high school to job. The work-study program is included among the examples.

GINZBERG, ELI, and others. Occupational choice; an approach to a general theory. New York, Columbia University Press, 1951. 271 pp.

The data reported in this book is based on 91 interviews with students from the sixth grade to graduate school. It has value for those determining vocational subjects to be taught and provides information on the process involved by the student in making the choice for his life's work.

GRANEY, MAURICE R. The technical institute. New York, The Center for Applied Research in Education, Inc., 1964. 111 pp.

A study of the technical institute in American higher education and its role in providing trained manpower. Divided into five chapters, this book presents an historical background of the technical institute, its relationship to present day technology, and its organization, administration, curricula, and faculty. The last chapter is devoted to the technical institute student's place in industry and society.

HAMLIN, HERBERT M. "Adult occupational education." *In* Handbook of Adult Education in the United States, edited by Malcolm S. Knowles. (Chicago, Adult Education Association of the U.S.A., 1960) pp. 542–550.

Brief summary and bibliography on adult vocational education now in the United States and the public policy for its training, prospects, and current needs.

HARBY, SAMUEL FARKAS. A study of education in the Civilian Conservation Corps camps of the Second Corps area, April 1933–March 1937. Ann Arbor, Mich., Edwards Brothers, Inc., 1938. 264 pp.

Originally written as a doctoral dissertation at Columbia University. This study seeks to find out what educational opportunities were offered to the enrollees, the extent and nature of the enrollees' response to his form of vocational education, and how well the programs fulfilled their aims in training unemployed youth.

HARRIS, NORMAN C. "Skilled manpower and the community college." *In* Higher Education in an Age of Revolution, edited by G. Kerry Smith. (Washington, Association for Higher Education, 1962) pp. 110–113.

One of the papers presented at the 17th annual National Conference on Higher Education. It briefly and concisely states the reasons why the junior college is able to "provide education for the world of work."

HAWKINS, LAYTON S., and others. Development of Federal legislation for vocational education. Compiled from "Development of Vocational Education," U.S. Department of Health, Education, and Welfare. Chicago, American Technical Society, 1962. 110 pp.

Selection of material from the 1951 work "Development of Vocational Education" by L. S. Hawkins, C. A. Prosser, an J. C. Wright. Brought up to date with additional material covering legislation from 1947 to the passage of the Manpower Development and Training Act of 1962.

———. Development of vocational education. Chicago, American Technical Society, 1951. 656 pp.

The social, economic, and educational factors which have influenced vocational education from the beginning. Each chapter contains references to source material. Appendix contains the text of Federal laws on vocational education up to 1947 and financial data on the amounts given to the States for 1951.

HENNIGER, G. ROSS. The technical institute in America. New York, McGraw-Hill, 1959. 276 pp.

Findings of the 1957–58 National Survey of Technical Institute Education conducted under the auspices of the American Society for Engineering Education. This study bridges the 30 years from the original 1928–29 study made by ASEE, known then as the Society for the Promotion of Engineering Education.

HILL, DAVID S. Introduction to vocational education; a statement of facts and principles related to the vocational aspects of education below college grade. New York, Macmillan, 1932. 483 pp.

Useful as an historic study on vocational education in the public high school in the post-World War I period. Contains courses of study for various branches of vocational training then in existence.

HILL, FRANK ERNEST. The School in the camps; the educational program of the Civilian Conservation Corps. New York, American Association for Adult Education, 1935. 84 pp.

A valuable reference written while the camps were in existence and full operation.

HOLLAND, KENNETH, and FRANK E. HILL. Youth in the CCC camp. Washington, American Council on Education, 1942. 263 pp.

This book was the result of a 5-year study sponsored by the American Youth Commission. It includes a survey and evaluation of the social and educational work of the CCC and a report on an experimental program in 10 selected camps.

HUNTER, WILLIAM L., and EVERETT G. LIVINGSTON. A guide to magazine articles on industrial arts education and vocational industrial education. Ames, Iowa, Iowa State College, Industrial Arts Dept., 1934. 75 pp.

A list of the major articles on industrial education appearing between January 1, 1920, and January 1, 1934. Has author and subject index.

ILLINOIS UNIVERSITY, COLLEGE OF EDUCATION. Curricula content for technical education. William John Schill, Principal Investigator. Urbana, 1964. 139 pp. (Cooperative research report No. 2048)

A sample survey interviewing technicians in 500 manufacturing establishments "to find out what a technician does and what knowledges are related to his job." The resulting data should prove useful to those determining the curriculum content of technical vocational courses.

"Industrial Education in the United States." *In* History of Manual and Industrial School Education by Lewis Flint Anderson. (New York, Appleton, 1926). pp. 135–251.

This history of industrial education in the United States is part II of this work. It covers developments from the period preceding the Civil War to 1925. Useful as a history of industrial education institutions for Negroes.

INTERNATIONAL LABOUR OFFICE. Automation and other technological developments. Report of the Director General. Geneva, Switzerland, The Office, 1957. 105 pp. (Report I—part I)

A review of technological changes in modern society, the impact of these changes upon the education and training of youth and adults. Information applicable to and typical of what is found in the United States.

———. Vocational training of adults in the United States. Geneva, Switzerland, the Author, 1948. 223 pp. (*Its* Vocational Training Monograph, No. 3)

Contents: General introduction; the Federal-State vocational education program; apprentice training (including Federal financial aid); in-plant training conducted by private undertaking; training within industry for supervisors; training conducted by trade unions; and provision for special training needs.

ITASCA CONFERENCE ON THE CONTINUING EDUCATION OF WOMEN. ITASCA STATE PARK, MINNESOTA, 1962. Education and a woman's life. Proceedings. Edited by Lawrence E. Dennis. Washington, American Council on Education, 1963. 153 pp.

Sponsored by the American Council on Education, with assistance from the Carnegie Corporation of New York and the University of Minnesota this conference discussed the theory and practice of continuing education for women and describes the pilot projects in vocational training in the area.

JOHNSON, PALMER O., and O. L. HARVEY. The National Youth Administration. Washington, U.S. Government Printing Office, 1938. 121 pp.

This report is useful in its discussion of the means used to train unemployed youth and the types of work-study programs used as a relief measure.

JOHNSTONE, JOHN W. Volunteers for learning: a study of the educational pursuits of American adults. Chicago, National Opinion Research Center, 1963. 148 1, 12 pp. (NORC report No. 89)

The first of a series of studies about the nature of adult education in America. Points out governmental activity in two phases: vocations and home and family life.

JOHNSTONE, JOHN W., and RAMON J. RIVERA. Volunteers for learning; a study of the educational pursuits of American adults. Chicago, Aldine Publishing Co., 1965. 624 pp.

Research conducted by the National Opinion Research Center on the nature of adult education in America. Information on vocational training of adults is mainly found in the chapter: "Why People Take Courses and What They Get From Them." (pp. 142–162)

KAHLER, ALFRED, and ERNEST HAMBURGER. Education for an industrial age. Ithaca,

N.Y., Cornell University Press, 1948. 334 pp.

This book was published for the Institute of World Affairs and is an evaluation of vocational education and training in the United States as they relate to the mobility of the labor force and employment stability. As a comparison, investigations into apprenticeship and other types of in-service training were made for selected foreign countries. Germany, Great Britain, Switzerland, and the Soviet Union were chosen, each country representing a special kind of training.

KANDEL, ISAAC LEON. Federal aid for vocational education; a report to the Carnegie Foundation for the Advancement of Teaching. New York, 1917. 127 pp. (The Carnegie Foundation for the Advancement of Teaching. Bulletin No. 10)

Contents: The legislative history of Federal aid for vocational education; constitutional and educational precedents, and subsequent developments of the Morrill Act.

KELLER, FRANKLIN J. The double-purpose high school: closing the gap between vocational and academic preparation. New York, Harper, 1953. 207 pp.

A book primarily for those responsible for providing courses in occupational training along with preparation for college entrance.

———. Principles of vocational education; the primacy of the person. Boston, D.C. Heath, 1948. 402 pp.

Philosophical principles underlying vocational education and a discussion of the aims and objectives of the ideal program.

LAND, SAMUEL L. Trade associations: their services to education; a study of the function of the National Trade Association in the promotion of training in industry. New York, Heating and Piping Contractors National Association, 1931. 141 pp.

Useful as a historical source of information concerning the efforts of trade associations to establish and maintain educational training programs for workers. Describes also the relationships of these organizations to Federal, State, and local boards for vocational education.

LATHROP, F. W. "The organization of vocational education for youth and adults." *In* The National Society for the Study of Education, 44th Yearbook: American education in the postwar period, part II: Structural reorganization. (Chicago, University of Chicago Press, 1945) pp. 84–96.

Contents: Vocational education prior to the war; wartime expansion of vocational education; liberal and cultural content in vocational curriculums; and some recent changes in vocational or related fields.

LEAKE, ALBERT H. The vocational education of girls and women. New York, Macmillan, 1918. 430 pp.

A study done at the time when vocational training for women was in its initial stages. Part I is devoted to home economics training, and part II discusses "women in industry outside the home," the problems of the unskilled woman who must work to support herself and family and the types of vocational schools then in existence for women.

LEE, EDWIN A. Objectives and problems of vocational education. New York, McGraw, 1928. 451 pp.

An evaluation of the Smith-Hughes Act, 10 years after its passage and enactment by leading educators written in individual essays.

LEVITAN, SAR A. Vocational education and Federal policy. Kalamazoo, Michigan, W. E. Upjohn Institute for Employment Research, 1963. 29 pp.

Partial contents: Development of Federal aid for vocational education; scope of federally supported vocational education; and the role of the Federal Government in improving vocational education.

LILES, PARKER. "Retraining for new jobs." *In* Recent and Projected Developments Affecting Business Education. National business education yearbook, v. 2, 1964. (Washington, National Business Education Association [NEA], 1964) pp. 51–71.

A discussion of the problem and cause of unemployment and a comprehensive review of the Area Redevelopment Act of 1961 and the Manpower Development Training Act, 1962, with emphasis on the latter. The responsibilities on the State and local levels in implementing the training program under this law are also included.

LONG, CLOYD DARL. School-leaving youth and employment; some factors associated with the duration of early employment of youth whose formal education ended at high school graduation or earlier. New York, Teachers College, Columbia University, 1941. 84 pp.

An earlier study of a new common problem—the "school dropout." This research centered around six schools located in Connecticut and New Jersey. It contains the findings of what the schools and communities did to help out of school youth from a period of 1934–38, and what became of the young people who had dropped out of school.

MCCARTHY, JOHN A. Vocational education:America's greatest resource. Chicago, American Technical Society, 1951. 397 pp.

At the time of the publication of this book, the author was assistant commissioner of education, Department of Education in New Jersey. In addition to an historical account of Federal vocational education legislation, material on the philosophy and organization of vocational programs is given.

MAYS, ARTHUR B. The concept of vocational education in the thinking of the general educator, 1845 to 1945. University of Illinois, 1946. 107 pp. (University of Illinois, Bureau of Educational Research. Bulletin No. 62)

Contents: Background ideas preceding 1845; schools for farmers and mechanics, 1845–1875; curriculum reform and general vocational education, 1875 to 1885; manual training as vocational education, 1885–1900; specific vocational education in secondary schools, 1900 to 1920; and emergence of the concepts of vocational education for all youth as a public school responsibility, 1920 to 1945.

———. Principles and practices of vocational education. New York, McGraw-Hill, 1948. 303 pp.

A college text useful for its coverage of the history of vocational training in the United States and for the bibliographies on the various types of vocational programs. It is also the revised edition of the author's earlier work "An Introduction to Vocational Education" published in 1930. (New York, Century Co., 1930. 323 pp.)

MEDSKER, LELAND L. The junior colleges: progress and prospect. New York, McGraw-Hill, 1960. 367 pp.

A study of 76 public 2-year colleges in 15 States, including treatment of the terminal and vocational training offered by these institutions.

MICHIGAN STATE UNIVERSITY. COLLEGE OF EDUCATION. Vocational education in a robot revolution, edited by George L. Brandon. East Lansing, the College, 1957. 37 pp.

The socioeconomic changes and the growth of automation, and the effect of these factors on vocational education. This report also presents the challenges of automation to the leaders in the field of vocational training.

———. ———. EDUCATIONAL RESEARCH SERIES. Vocational education: Its effects on career patterns of high school graduates. East Lansing, 1963. 182 pp. (*Its* ER series No. 18)

"A career pattern study of 116 metropolitan Lansing public and parochial high school graduates who have been on the labor market from June 1956 to December 1962—a 78-month work period."

———. ———. ———. Vocational education: Philosophy and objectives. East Lansing, 1962. 32 pp. (*Its* ER series No. 6)

Report of Task Force No. 1 in the overall Michigan Vocational Education Evaluation Project. It defines the objectives desirable in teaching vocational education in Michigan secondary schools.

———. ———. ———. Vocational curricula in Michigan by Sigmund Nosow. East Lansing, 1963. 50 pp. (*Its* ER series No. 17)

A study of the work force and unemployment in Michigan and how the factors of each relate to vocational training offered in the schools.

MILLER, REX, and LEE H. SMALLEY, eds. Selected readings for industrial arts. Bloomington, McKnight and McKnight Publishing Co., 1963. 360 pp.

A selection of 34 articles representing essential readings for members of the industrial arts teaching profession. Contents are arranged under these headings: "History," "Content and Organization," "Teaching Techniques," "The Future."

MOORE, BERNICE MILBURN. "The case for education for home and family living." *In* Education for a changing world of work. Report of the Panel of Consultants on Vocational Education. Appendix III. (Washington, U.S. Government Printing Office, 1963) pp. 53–71.

A report of the Texas Cooperative Youth Study in which 13,000 high school youths from 185 Texas high schools expressed their feelings and attitudes of personal worth, social competence, and other factors of their family life. One salient point brought out: ". . . youth from culturally handicapped parents do have a more difficult time remaining in school." Since the youths of this generation will be parents of the next, it is necessary to provide them with sufficient education in home and family living to insure a greater measure of success in their role as parents.

NATIONAL ADVISORY COMMITTEE ON THE JUNIOR COLLEGE. A national resource for occupational education. Washington, American Association of Junior Colleges, 1964. 9 pp.

A policy statement on the role of the junior college and its possible responsibilities in providing occupational education to meet America's manpower needs.

NATIONAL EDUCATION ASSOCIATION. U.S. DEPARTMENT OF RURAL EDUCATION. Vocational education for rural America. Edited by Gordon I. Swanson. Washington, 1959. 354 pp. (*Its* Yearbook 1958–59)

A discussion of the social and economic forces influencing vocational education for youth in rural and small urban areas, and of what should be done to change the contents of their educational programs in the field of vocational training.

NATIONAL MANPOWER COUNCIL. Education and manpower. Edited by Henry David. New York, Columbia University Press, 1960. 326 pp.

A selection of chapters and articles from the publications of the National Manpower Council. Those chapters dealing directly with the relationship of manpower and vocational training are "Issues in vocational education" (pp. 127–147) and "Types of vocational schooling" (pp. 148–177)

———. Improving the work skills of the Nation; proceedings of a conference on skilled manpower, held April 27–May 1, 1955 at Arden House, Harrimon Campus of Columbia University, New York, Columbia University Press, 1956. 203 pp.

Ten papers by various educators, businessmen, and others discussing policy objectives and other subjects to improving the Nation's supply of skilled workers mainly through the cooperation of the school, the community, and industry.

———. A policy for skilled manpower; a statement by the Council with facts and figures prepared by the research

staff. New York, Columbia University Press, 1954. 299 pp.

See part II (pp. 37–299) on "Facts and Issues about Skilled Manpower," including types of vocational training offered in industry, educational institutions, and the Armed Forces.

NATIONAL SOCIETY FOR THE PROMOTION OF INDUSTRIAL EDUCATION. Principles and policies that should underlie State legislation for a State system of vocational education. A tentative statement of principles and policies formulated at a meeting of a committee . . . in annual convention, at Philadelphia, December 1912 . . . Philadelphia (?), the Author, 1913. 6 pp.

A list of 31 guidelines for the establishment of State departments of vocational education.

NATIONAL SOCIETY FOR THE STUDY OF EDUCATION. Twenty-third yearbook. Part II: Vocational guidance and vocational education for the industries, prepared by A. H. Edgerton . . . Edited by Guy M. Whipple. Bloomington, Ill., Public School Publishing Co., 1924. 435 pp.

Partial contents: Guidance problems in large cities; guidance activities in small city systems; day and evening industrial courses in smaller cities; and training foremen and other leaders in industry.

———. Forty-second yearbook, 1943. Part I: Vocational education. Chicago, University of Chicago Press, 1943. 494 pp.

Partial contents: Legislative commitments affecting vocational education; vocational education through nonschool governmental agencies; and vocational programs in different educational institutions.

———. Sixty-fourth yearbook, 1965. Part I: Vocational education, edited by Melvin Barlow, Chicago, University of Chicago Press, 1965. 301 pp.

Developed during the period of vocational education changes, the yearbook's production was interrupted by the passage of the Vocational Education Act of 1963. Each of the 13 chapters are devoted to different phases of vocational education in the United States. In chapter 8, for example, the impact of Federal legislation and policies is discussed by Major Mobley and Melvin Barlow, and much information is given about the period between the passage of the Smith-Hughes law to the enactment of the Vocational Education Act of 1963.

NATIONAL SOCIETY FOR VOCATIONAL EDUCATION. Bulletin No. 1–36. New York, 1907–23.

Valuable source material for tracing the development of vocational education in America. These bulletins also contain the proceedings of the annual meetings held by this organization. First organized at Cooper Union, New York, November 16, 1906, by prominent businessmen and educators, the organization was first known as the Society for the Promotion of Industrial Education. In 1917, with the passage of the Smith-Hughes Act, it became known as the National Society for Vocational Education. Merging with other groups, this organization became a part of the American Vocational Association in 1925.

NORTON, THOMAS LOWELL. Public education and economic trends. Cambridge, Mass., Harvard University, Graduate School of Education, 1939. 196 pp.

A group of seven lectures delivered at the Harvard Graduate School of Education in April and May of 1939 on the relationship of education to the changing character of the American economy and the demands of the labor market.

PALLONE, NATHANIEL J. No longer superfluous; the educational rehabilitation of the hard-core unemployed. South Bend, Ind., South Bend Community School Corporation, 1965. 60 pp.

This report was prepared through the research program of the U.S. Office of Manpower, Automation, and Training and describes a project sponsored by MDTA funds. The information here is centered on the learning outcomes of the

trainees, their experiences with the curriculum offered, and the reorientation of their attitudes.

PATTERSON, WILLIAM F. Educating for industry; policies and procedures of a national apprenticeship system. New York, Prentice-Hall, 1946. 229 pp.

A survey of the apprenticeship system in the United States, including the role played by the Federal Government in introducing the national apprenticeship system. An extensive bibliography on the subject is to be found on pp. 155–184.

PENNSYLVANIA STATE UNIVERSITY. DEPARTMENT OF VOCATIONAL EDUCATION. Pennsylvania meets the challenge of retraining; case studies of a three pronged attack. By Carl J. Schaefer and John M. Shemick. University Park, Pennsylvania, the Author, 1964. 85 pp.

The final report of a research project sponsored in part by the Ford Foundation. Centered upon three areas of Wilkes-Barre, Pottsville, and Phoenixville, these case studies furnish information on the programs used, the development of the curriculum, the teachers employed, and the types of trainees attending. The final chapter is titled: "Employment and Societal Effects of Retraining Programs."

PROSSER, CHARLES ALLEN. Evening industrial schools, by Charles A. Prosser, with the collaboration of M. R. Bass. Rev. ed. Chicago, American Technical Society, 1951. 372 pp.

Although designed as a textbook for students of vocational education, this work provides a history of the forms of vocational training given to workers in the past, how demands of technological change have brought about changes also in the structure, and purpose of additional training for workers already employed.

PROSSER, CHARLES A., and CHARLES R. ALLEN. Vocational education in a democracy. New York, Century Co., 1925. 580 pp.

A discussion of the principles underlying vocational education of secondary grade, the policies which should be adopted to make this form of training successful, and suggestions for methods in carrying out these policies.

PROSSER, CHARLES ALLEN, and THOMAS H. GUIGLEY. Vocational education in a democracy. Chicago, American Technical Society, 1949. 575 pp.

A revision of a work first published in 1925 by C. A. Prosser and C. R. Allen. It updates this earlier work, describing the development of vocational education and subsequent Federal legislation in this field since 1925.

PURDUE UNIVERSITY. DIVISION OF EDUCATION. STUDIES IN EDUCATION. Vocational education in public schools as related to social, economic, and technical trends. Part I: The analysis of trends and concepts. By F. J. Woerdehoff and others. Lafayette, Ind., 1960. 116 pp.

The initial phase of this study. It is concerned with "the identification of social, economic, and technical trends related to vocational education and the ranking of the trends in terms of . . . in planning programs of vocational education."

———. ———. ———. Vocational education in public schools as related to social, economic and technical trends. Part II: The appraisal of programs of vocational agriculture and industrial education. Frank J. Woerdehoff, Norbert J. Nelson, and John K. Coster, Project Directors. Lafayette, Ind., 1960. 489 pp., 91 (Cooperative research project No. 385)

Results of a study of a sample of Indiana high schools "to identify factors related to the desirable characteristics" of agricultural and industrial vocational education.

RAKESTRAW, CLARENCE EDWARD. Training high school youth for employment, Chicago, American Technical Society, 1947. 217 pp.

Although somewhat dated, this work is still of value. The author, a staff member of the U.S. Office of Education at the time this was written, describes

the book as "a plan under which vocational training on a cooperative part-time basis can be offered in high schools."

RAVNER, PEARL (COOPER). Training mature women for employment, the story of 23 local programs. Prepared in the Division of Research of the Women's Bureau by Pearl C. Ravner with the assistance of Jean A. Wells and Annie Lefkowitz. Washington, U.S. Department of Labor, Women's Bureau, 1955. 46 pp. (U.S. Women's Bureau. Bulletin No. 256.)

"This report provides examples of projects established by community organizations to meet the training needs of women ranging in economic standing from those receiving public assistance to those able to pay tuition fees at private schools."

RESEARCH COUNCIL OF THE GREAT CITIES PROGRAM FOR SCHOOL IMPROVEMENT. New programs in vocational education. Chicago, The Author, 1964. 45 pp.

Statement describing vocational education programs developed by the member Great Cities since 1962. These cities are: Baltimore, Boston, Chicago, Cleveland, Detroit, Houston, Los Angeles, Milwaukee, New York City, Philadelphia, Pittsburgh, St. Louis, and Washington, D.C.

———. Report submitted to the Panel of Consultants on Vocational Education in the large cities of America. Chicago, The Author, 1962. 102 pp.

"This document . . . is a status study of vocational education in the member cities. It includes a statement of policy with regard to vocational education, a summary of current practices, and information relating to enrollment and a review of basic problems."

ROBERTS, ROY W. Vocational and practical arts education. New York, Harper, 1957. 637 pp.

A study of vocational and practical arts education in the public secondary schools and their relationship to other areas of the curriculum. Includes accounts of the development of federally aided programs.

———. Vocational and practical arts education; historical development and principles. 2d ed. New York, Harper, 1965. 569 pp.

An updated edition of the 1957 work.

ROBISON, EMILY, comp. Vocational education. Second and revised edition by Julia E. Johnson. New York, H. W. Wilson Co., 1920. 359 pp.

First published in 1917, this book offers a valuable compilation of early source material on vocational education in the United States. In this revised edition, a bibliography of some 300 references has been added.

RUSSELL, JOHN DALE and associates. Vocational education. Staff study number 8. Prepared for the Advisory Committee on Education. Washington, U.S. Government Printing Office, 1938. 325 pp.

This monograph was originally prepared as a staff study for the Advisory Committee on Education appointed by President Franklin Delano Roosevelt on September 19, 1936. Under its original assignment, the Committee was known as the President's Committee on Vocational Education. In the introduction the authors state the scope and purpose of this work. "This study undertakes to survey in a fairly broad way the whole plan of organization for the federally reimbursed program of vocational education, the outcomes of this service, the needs of the country for occupational preparation, and the manner in which these needs may best be met."

SEARS, WILLIAM P., Jr. The roots of vocational education; a survey of the origins of trade and industrial education found in industry, education, legislation, and social progress. New York, John Wiley & Sons, 1931. 310 pp.

This comprehensive study is divided into three parts. Part I is a summary of the social forces that created the needs for vocational education, beginning with a social history of England and the

founding of the American Colonies extending to the late 1920's. In Part II titled "The Educational Evolution," the author traces the growth of industrial vocational education in industry and educational institutions. Part III is devoted to the contributions of social agencies and educators to vocational education in the United States.

SHAFFER, HELEN B. Jobs for young people. Washington, Editorial Research Reports, 1961. pp. 501–517. (Editorial research reports, 1961, v. 2, No. 2, July 12, 1961)

Contents: Changed outlook for young job-hunters; job handicaps of undereducated youths; and programs to prepare youths for work.

SMITH, HAROLD T. Education and training for the world of work; a vocational education program for the State of Michigan. Kalamazoo, W. E. Upjohn Institute for Employment Research, 1963. 165 pp.

A study of "what should be expected of vocational and technical education in our present-day society, . . . what institutions, what administrative organization and what financial structure are needed in Michigan before these expectations can be fulfilled."

SNEDDEN, DAVID S. American high schools and vocational schools in 1960. New York Teachers College, Columbia University, 1931. 122 pp.

An essay written from a Utopian point of view as to what could be expected of American secondary school organization and vocational training in a 30-year period. The author uses a mythical "Chinese National Board of Education" report for his forecasts. Useful as a "Brave New World" study in the field of education. Title on cover: "Secondary Schools, 1960."

———. Vocational education. New York. Macmillan, 1920. 587 pp.

A discussion of what was considered "current problems in vocational education" when that type of training was just beginning. It includes all forms of vocational educational programs with chapters also on the administration of vocational education and the training of teachers for vocational schools. Appendix A (pp. 515–533) has statistics taken from the 1910 census on the number of workers engaged in specified gainful occupations, occupations that have long since been displaced by automation.

——— and others. Vocational education; its theory, administration and practice. Boston, Houghton Mifflin, 1912. pp. 85, 207, 75.

A collection of three monographs on the status of vocational education in the early part of the 20th century. Contents: "The problem of vocational education" by David Snedden; "The people's schools: a study in vocational training" by Ruth Mary Weeks; and "The improvement of rural schools" by Ellwood P. Cubberly.

SOCIETY FOR THE PROMOTION OF ENGINEERING EDUCATION. A study of technical institutes; a collateral project to the investigation of engineering education. Lancaster, Pa., Lancaster Press, Inc., 1931. 281 pp.

A 1928–1929 national survey made of postsecondary technical training schools in the United States, their historical development and status for that period of time. This study also includes information on technical schools in France, Great Britain, and Germany.

STOMBAUGH, RAY. A survey of the movements culminating in industrial arts education in secondary schools. New York, Teachers College, Columbia University, 1936. 192 pp.

This study covers the period from 1871, with the establishment of the Boston Whittling School, up to 1936. Eight "trends" or movements are discussed.

STRUCK, F. THEODORE. Vocational education for a changing world. New York, John Wiley & Sons, 1945. 550 pp.

Although a textbook, this work, prepared by a former head of the Depart-

ment of Industrial Education at Pennsylvania State College, covers the history and development of vocational education of less than college grade. It also includes the policies of labor and management as they relate to vocational education and the attitude of many trade and educational associations toward education for work. Each chapter contains excellent bibliographies related to the topics discussed.

Terminal education in higher institutions with special reference to the readjustment of higher education to meet current national needs. Proceedings of the Institute for Administrative Officers of Higher Institutions, 1942. Vol. 14. Edited by John Dale Russell. Chicago, University of Chicago Press, 1942. 198 pp.

A collection of 18 papers presented at the 19th session of the Institute for Administrative Officers of Higher Institutions. Contributions consist of an overall view of terminal education in various vocational fields, particularly at the junior college level and the readjustments of higher education to meet national manpower needs, with emphasis on the country's war effort.

THOMAS, LAWRENCE G. The occupational structure and education. Englewood Cliffs, Prentice Hall, 1956. 502 pp.

A study of the relationship of American vocational training and the occupational structure in our economy. This "occupational structure" is discussed in regard to income, prestige, and job satisfaction, qualifications demanded by employers, and the contribution of vocational schools to it.

TRICHE, ANDREW. A comparative study of vocational education in the 48 States. State College, Pennsylvania, School of Education, Pennsylvania State College, 1935. 47 pp. (Penn State studies in education. No. 15)

Originally written as a doctoral dissertation. Contains 1930 statistics pertinent to vocational education, arranged by State. Includes enrollment figures, expenditures, etc.

U.S. ADVISORY COMMITTEE ON EDUCATION. Report of the Advisory Committee on Education. Message from the President of the United States, transmitting the Report of the Advisory Committee on Education appointed in September 1936 to study the experience under the existing program of Federal aid for vocational education. Washington, U.S. Government Printing Office, 1938. 148 pp. (85th Cong. 3d sess. House. Doc. No. 529) Issued also without document note under title: "Report of the Committee."

Message from President F. D. Roosevelt on the relation of vocational education to existing economic and social conditions and the need to expand the program.

———. Report of the Committee, February 1938. Washington, U.S. Government Printing Office, 1938. 243 pp.

Official report of the Committee to President F. D. Roosevelt. Contains a general summary of education in our national life and a recommended program, mainly in vocational training.

U.S. COMMISSION ON NATIONAL AID TO VOCATIONAL EDUCATION. Vocational education. Report . . . together with the Hearings held on the subject made pursuant to the provisions of Public Resolution No. 16, 63rd Congress. (S.J. Res. 5). In two volumes. Washington, U.S. Government Printing Office, 1914. 292 pp. (63d Cong., 2d sess. House Doc. No. 1004)

A report of the status of vocational education in the United States in 1914, and the reasons for Federal participation in this kind of training. Volume II gives the testimony of prominent educators, industrialists, and members of the Armed Forces on vocational programs in existence at the time and the demand for expansion.

U.S. CONGRESS. HOUSE. COMMITTEE ON EDUCATION. Development of vocational

education in the several States. Hearing . . . before the Committee on Education on H.R. 9201 (H.R. 12241), a bill to provide for further development of vocational education in the several States. February 7, March 20 and 21, 1928. Washington, U.S. Government Printing Office, 1928. 87 pp. (70th Cong., 1st sess.)

Contains testimony and statements by leading educators and others on the needs of vocational education at the time and reasons for expanding it.

———. SENATE. REPUBLICAN POLICY COMMITTEE. The forgotten youth. Remarks in the Senate. Congressional record (daily ed.), v. 109, March 1963: 3965–3967 (Part I included in Senate hearings on Youth Employment Act [S. 1])

A study of vocational education in the United States, what it has contributed, and the problems involved.

U.S. DEPARTMENT OF LABOR. OFFICE OF THE SECRETARY. Report of the Secretary of Labor to the Congress on research and training activities in accordance with section 309 of the Manpower Development and Training Act. A report and evaluation of research, trainees, training programs, and training activities. Washington, U.S. Government Printing Office, 1963.

Issued annually. Title varies. Reports for 1964 and 1965 entitled "Manpower Research and Training under the Manpower Development and Training Act of 1962."

U.S. FEDERAL BOARD FOR VOCATIONAL EDUCATION. Annual report, 1917/18–1932/33. Washington, U.S. Government Printing Office, 1917–33.

First report contains initial development of Smith-Hughes Act and its implementation in the various States. Continuing reports are on the progress made in the States in the development of vocational education under this legislation and its amendments.

———. Bulletin No. 1–171. Washington, U.S. Government Printing Office, 1917–33.

Statement of Policies issued as Bulletin No. 1, 1917, May 1922 (rev. ed.) and December 1926.

U.S. OFFICE OF EDUCATION. Art and industry. Education in the industrial and fine arts in the United States. By Isaac Edwards Clarke. Washington, U.S. Government Printing Office, 1885–98. 4 vols. in 5. (Printed also as 46th Cong. 2d sess. Senate. Ex. Doc. No. 209, pt. 1–4)

Contents: Part I—Drawing in public schools; Part II—Industrial and manual training in public schools; Part III—Industrial and technical training in voluntary associations and endowed institutions; Part IV—Industrial and technical training in schools of technology and in U.S. land-grant colleges.

———. Digest of annual reports of State Boards for Vocational Education to the Office of Education, Division of Vocational Education. Washington, U.S. Government Printing Office, 1933.

Supersedes the annual reports of the U.S. Federal Board for Vocational Education published from 1917 to 1932. Contains condensed versions of the annual reports which the States are required to make on the past year's accomplishments, receipts, and expenditures.

———. Educationally deficient adults; their education and training needs. Washington, U.S. Government Printing Office, 1965. 60 pp.

The reprint of a survey conducted by the Information and Training Services, a Division of McGraw-Hill, Inc., New York, and authorized by the Division of Vocational and Technical Education, U.S. Office of Education. Dealing mainly with the educational and training needs of educationally deficient adults, this report also furnishes guidelines for a plan to meet these needs and the materials that might be used in providing vocational training for jobs.

U.S. OFFICE OF EDUCATION. Industrial education in the United States. A special report prepared by the U.S. Bureau of Education. Washington, U.S. Government Printing Office, 1883. 319 pp. (Printed also as 47th Cong., 2d sess., Senate. Ex. Doc. No. 25)

The first part of this detailed report, prepared in response to a Senate resolution of December 15, 1882, gives an overall summary of the status of industrial education in the land-grant colleges, private institutions, and in elementary and secondary schools. Part II (appendixes) is devoted to the individual land-grant colleges, giving a brief history of each, courses of study, and statistics on enrollments and expenditures. Includes illustrations also of the schools and the floor plans of the main buildings.

———. Technological advances and skilled manpower; implications for trade and industrial education. An annotated selected bibliography. Washington, U.S. Government Printing Office, 1956. 67 pp. (*Its* Misc. 3509 Rev. Nov. 1, 1956)

Compiled by Mr. Howard K. Hogan, Consultant in the Division of Vocational Education, this bibliography lists items representing the views, primarily, of management, labor, and education on the subject of vocational education as it relates to the production of skilled manpower.

———. Training the hard-core unemployed: a demonstration-research project at Virginia State College, Norfolk Division. (An interim report.) Washington, U.S. Government Printing Office, 1964. 101 pp. (*Its* Cooperative Research Monograph No. 13)

A report on the demonstration-research project conducted at the Norfolk Division of Virginia State College to find methods of training both the semiliterate and the literate unskilled worker.

———. Vocational division bulletin, No. —, Washington, U.S. Government Printing Office, 1934–

Continues the numbering of the bulletin formerly issued by the U.S. Federal Board for Vocational Education.

———. Vocational education and changing conditions; changing economic and social conditions and their effect upon vocational education. By Charles Allen Prosser. Washington, U.S. Government Printing Office, 1934. (*Its* Vocational Education Bulletin No. 174. General Series No. 5)

A survey made by the Federal Board for Vocational Education in the U.S. Office of Education and its outcome is described thus: "The economic and social trends which appear to be of significance for vocational education have been identified, listed, and classified . . . as they bear on different types of vocational training. . . ."

———. Vocational education in the next decade. Washington, U.S. Government Printing Office, 1961. 197 pp.

National needs and objectives in vocational education are defined in this report and from these definitions guidelines may be obtained in evaluating State or local programs of vocational education.

———. Vocational education in the years ahead; a report of a Committee to Study Postwar Problems in Vocational Education. Washington, U.S. Government Printing Office, 1945. 329 pp. (*Its* Vocational Bulletin No. 234)

Report of a committee appointed by U.S. Commissioner of Education, John W. Studebaker. Divided into nine chapters and an appendix, the report covers all phases of vocational training up to 1945.

———. Vocational-technical education for American industry. By Lynn A. Emerson. Washington, U.S. Government Printing Office, 1958. 25 pp. (*Its* circular No. 530, 1958)

Contents: Vocational-technical occupations (definition and classification); education for vocational-technical occupations (growth of, institutions providing training); bibliography (selected

references, annotated references); organizations interested in technical education (list of 19 organizations with brief description of each).

———. Work experience education programs in American secondary schools, by DeWitt Hunt. Washington, U.S. Government Printing Office, 1957. 94 pp. (*Its* Bulletin 1957, No. 5)

Partial contents: Significant publications on work experience education; the development of work experience as a part of secondary education in American schools; types of work experience programs.

U.S. OFFICE OF MANPOWER, AUTOMATION AND TRAINING. Developing human resources through occupational training. A report of occupational training under the Area Redevelopment Act for the fiscal year ending June 30, 1964. (Washington, U.S. Government Printing Office, 1964) 35 pp.

Contents: Putting the program in perspective; the training program in operation; investing in human resources; training in action; program appraisal, emphasis, and direction; statistical appendix.

———. Manpower and automation research sponsored by the Office of Manpower, Automation and Training through June 30, 1965. Washington, U.S. Government Printing Office, 1965. 133 pp.

Research projects listed include those on vocational education, vocational school graduates, the impact of technological change on vocational training, and the problems encountered in training unemployed youth.

———. Training disadvantaged groups under the Manpower Development and Training Act. By Chester W. Hepler and others. Washington, U.S. Department of Labor, 1963. 24 pp. (*Its* Manpower Evaluation Report No. 1)

"This report evaluates the extent to which training programs established under the act are meeting the need for marketable skills among disadvantaged groups—persons who, because of certain personal characteristics or lack of suitable work skills, are markedly disadvantaged in the competition for available jobs."

———. Unemployment and retraining; an annotated bibliography of research. Washington, U.S. Government Printing Office, 1965. 31 pp.

A brief but well-annotated bibliography relating to "social psychological factors in job training and hard-core unemployment."

———. Young workers: their special training needs by Lloyd Feldman and Michael R. Peevey. Washington, U.S. Government Printing Office, 1963. 19 pp. (*Its* Manpower Research Bulletin No. 3)

A review of the training needs and the status of training for young persons 14–19 years old who will be entering the labor market with a high school education or less.

U.S. PANEL OF CONSULTANTS ON VOCATIONAL EDUCATION. Education for a changing world of work. Report of the Panel of Consultants on Vocational Education. Washington, U.S. Government Printing Office, 1963. 296 pp.

This is the main body of the report made by the Panel of Consultants on Vocational Education, Benjamin C. Willis, chairman. Encompassing the entire field of vocational education in the United States, the report includes the historic development of this form of education and the programs now in existence. It also points out the possible gains that can be made by furnishing vocational training to youths and adults with particular needs—such as the culturally disadvantaged, the school dropout, the functionally illiterate. This report also contains an excellent bibliography, pp. 269–279.

U.S. PRESIDENT. Manpower report of the President and a report on manpower requirements, resources, utilization, and

training. By the U.S. Department of Labor. Transmitted to the Congress . . . Washington, U.S. Government Printing Office, 1963–

Report issued annually in March of each year.

U.S. PRESIDENT'S COMMITTEE ON YOUTH EMPLOYMENT. The challenge of jobless youth. Washington, U.S. Government Printing Office, 1963. 20 pp.

Fourteen recommendations for a program to develop policies for education and training, guidance, and employment opportunities for jobless youth.

VENN, GRANT. Man, education, and work; postsecondary vocational and technical education. Washington, American Council on Education, 1964. 184 pp.

This report was the result of a conference called by the American Vocational Association in Washington, D.C., during September 1962. Partial contents: The development of vocational and technical education; vocational and technical education in secondary and higher education; the Federal Government and vocational and technical education; major issues in vocational and technical education.

WENRICH, RALPH C. "Vocational education." *In* Encyclopedia of Educational Research." 3d ed. Edited by Chester W. Harris. (New York, Macmillan, 1960.) pp. 1555–1564.

Reviews and lists 55 sources about vocational education in the United States and its development up until 1958.

WOODWARD, C. M. Manual training in education. New York, Scott, 1890. 310 pp.

This work was prepared for English readers. It gives additional material in industrial training not given in his 1887 work. The author reports on the success of manual training graduates and the mental and physical benefits to be gained from this type of education.

———. The manual training school. New York, Heath, 1887. 366 pp.

A history of the Manual Training School of Washington University of St. Louis, including a discussion of its aims, methods and results. Addresses by C. M. Woodward on manual training are also a part of this book.

Part II—*PERIODICAL ARTICLES*

Adult education in East St. Louis. *Public aid in Illinois*, v. 32, May 1965: 1–5.

A description of the Adult Education School at 3105 Missouri Avenue in East St. Louis, operating on a full-time basis to provide training for welfare and public aid recipients in order that they may acquire basic education and job skills. Information on courses and schedules are included as well as some encouraging results.

ALDEN, VERNON R., and JOHN A. HODGES. When classrooms fail. *Teachers college record*, v. 66, January 1965: 305–309.

The purpose and objectives of the Job Corps established by the Economic Opportunity Act, a brief summary of the curriculum of the Job Corps camps, and the "challenge" to schoolmen are the topics discussed in this article.

ARNOLD, WALTER M. All-age, all-job program. *American education*, v. 1, December 1964–January 1965: 8–11.

An official of the U.S. Office of Education discusses what he believes a "balanced program of vocational education" should be and cites instances of such programs now in existence in North Carolina, Pennsylvania, and other States.

———. Area vocational education programs. *School life*, v. 42, January 1960: 16–21.

"The nature and activities of the programs receiving Federal aid under title VIII of the National Defense Education Act."

———. Changing patterns in vocational education. *Education*, v. 85, December 1964: 206–10.

A discussion of "the aims, provisions, and results of the Manpower Development and Training Act of 1962 and of the Vocational Education Act of 1963 in relation to current needs."

———. Meeting manpower needs through technical education. *American vocational journal*, v. 37, December 1962: 8–11.

A report on the technical training programs made possible through the provisions of title VIII of the National Defense Education Act.

———. Vocational education—its role today. *Theory into practice*, v. 3, December 1964: 163–166.

The Assistant Commissioner of Education for Vocational and Technical Education, U.S. Office of Education, cites some of the urgent needs for vocational education today and discusses "six salient features" of the Vocational Education Act of 1963.

———. What the Vocational Education Act implies for local school agencies. *Industrial arts and vocational education*, v. 54, May 1965: 23–25.

Pertinent information for educators at "the grass-roots level" by the Assistant Commissioner for Vocational and Technical Education, U.S. Office of Education.

ARNSTEIN, GEORGE E. Vocational education. *National Association of Secondary-School Principals bulletin*, v. 48, November 1964: 56–72.

The author believes "vocational education, by design, budget, and legislation, has been separated from the main current of American education." In discussing means of making vocational education more effective, Mr. Arnstein also includes remarks on the Report of the Panel of Consultants on Vocational Education. (*See* entry U.S. Panel of

Consultants on Vocational Education. "Education for a changing world of work." Report of the Panel of Consultants on Vocational Education. Washington, U.S. Government Printing Office, 1963.)

ASH, L. C. Trade and industrial education; an effective program. *Education,* v. 85, December 1964: 211–216.

"The significant role that trade and industrial education plays in preparing potential dropouts for various kinds of useful and satisfying vocations in the years ahead."

Automation and youth. *The American child,* v. 42, March 1960. 24 pp.

A collection of articles by Jerome Rosow, Walter Reuther, and others on the effects of automation on the training and the employment of youth in this decade.

Automation: outlook for youth. *The American child,* v. 44, November 1962. 15 pp.

Four brief but pertinent articles are included in this issue: View from Washington by Seymeur Wolfbein; Automation: training for what? by Louise Knapp; The school story by T. Stanley Warburton; The controversy ahead by William Gomberg.

AVRITCH, RICHARD T. Vocational education: a continuing problem. *Journal of education,* v. 148, October 1965: 35–42.

"The author attempts a critical analysis of the Vocational Education Act of 1963 . . . traces the history of vocational education, exposes various negative attitudes toward it."

BACHMURA, FRANK T. The Manpower Development and Training Act of 1962—its significance for rural areas. *Journal of farm economics,* v. 45, February 1963: 61–72.

A discussion of the magnitude of farm unemployment and the opportunity for organized rural effort for communities and for individuals in rural areas.

BARLOW, MELVIN L. The enemy unseen. *American vocational journal,* v. 34, January 1959: 10–13.

A prominent vocational educator believes that the first phase of vocational education has been successful in that "making a living" type of training has been achieved. However, this attitude has within it the "enemy unseen," for vocational education of this kind has no responsibility for, or relationship to, the general goals of education. It blinds us to the vast resources of the program, placing it in the "rut leading to oblivion."

———. Impact of a world of missiles, rockets, and satellites on vocational education. *Teachers college journal,* v. 31, January 1960: 100–4.

The author believes that the real impact of technological change upon our vocational education programs is to be found in the sociological problems this impact has created. One solution lies in easing up "on the death grip we have upon some of our earlier principles and convictions . . . and permit ourselves and our programs to be influenced by other environments."

BARNES, J. WARD. Continuation center for adult education in Eldorado. *Public aid in Illinois,* v. 32, May 1965: 6–10.

How this center came into being and the programs conducted for uneducated and unemployed adults in Eldorado, Ill. Those attending are receiving welfare aid.

BAXTER, J. D. Job retraining problem grows; how should it be handled? *Iron age,* v. 189, February 1, 1962: 65–67.

A training specialist from the General Electric Co. states the reasons why he believes that retraining is a job for industry and points out what is needed to accomplish this retraining.

BECHTEL, HELEN. A sampling of school dropout projects in Texas. *Texas journal of secondary education,* v. 18, spring 1965: 13–19.

Brief summary of projects carried out by various Texas school systems and communities for school dropouts. These programs consist of special classes, vo-

cational courses geared to local employment needs, part-time jobs, and study centers.

BOLGER, JAMES. New look in vocational education. *Business education world,* v. 45, September 1964: 13–16; October 1964: 28–30+; November 1964: 26–29; December 1964: 18–21.

The editor of Business Education World has written four articles on vocational education "new look" with subtitles as follows: "The first 100 years in vocational education;" "The forces that demand education for employability;" "Provisions of the Vocational Education Act of 1963;" "Business education and the Vocational Education Act of 1963."

BOWEN, C. R. The paradoxes of abundance. *National Association of Secondary-School Principals Bulletin,* v. 48, November 1964: 3–15.

A review of the technological revolution upon the U.S. economy and employment, where the "new jobs" will most likely come, and the possibilities that might be accomplished by providing the right kind of education for an abundant society with its great segments of poverty.

BRAZZIEL, WILLIAM F. Basic education in manpower retraining programs. *Adult leadership,* v. 13, November 1964: 145–146.

The author is the Director of General Education, Norfolk Division, Virginia State College. In this article he describes the retraining program in the Norfolk Division, a program designed to raise the basic skill levels of youths and adults.

BROOKS, L. B. Norfolk State College experiment in training the hard-core unemployed. *Phi Delta Kappan,* v. 46, November 1964: 111–116.

An account of a project to retrain unemployed adults, financed by grants from the U.S. Office of Education, Cooperative Research Division, and the Office of Manpower, Automation and Training of the U.S. Department of Labor. Conclusion: ". . . that proper training can work miracles in the lives of men formerly without hope."

BROWNELL, S. M. School dropouts and unemployed youth. *American journal of public health,* v. 52, September 1962: 1401–1406.

Solving the problem of young people in rural areas who drop out of school and have little chance of employment.

BURKETT, L. A., and others. Vocational and technical education: issues, developments, principals' views. *National Association of Secondary-School Principals bulletin,* v. 47, November 1963: 150–160.

Three articles by Lowell A. Burkett, Merle E. Strong, and Orlin D. Trapp on the relationship of the public secondary school and vocational-technical education programs as they now exist.

BYERLY, CARL L. Vocational Education Act 1963 holds unusual implications for large cities. *School shop,* v. 23, April 1964: 40–41.

The assistant superintendent of the Detroit public schools, Mr. Byerly tells in this article of the changes that can be expected in the large cities' training programs as a result of the Vocational Education Act, 1963.

CARDOZIER, V. R. Vocational education and Federal control. *American school board journal,* v. 150, April 1965: 30–32.

A discussion of the new State requirements for implementing the Vocational Education Act of 1963 by a former specialist in the Vocational Education Division of the Office of Education.

CAVANAUGH, DONALD. Industry's needs and the vocational school. *School shop,* v. 23, March 1964: 17–19.

An engineer from the mechanical industries discusses the needs of his particular field and what the vocational schools are doing to supply the trained manpower to fill these needs.

CHAMBERLAIN, NEIL W. Job obsolescence: Challenge and opportunity. *Educational record,* v. 44, January 1963: 26–32.

Contents: The casualties of automation (the unskilled worker); the stultifying effects of technological unemployment (the plight of the unskilled older worker); continuing education as a modern substitute for experience (new concepts of formal education are needed); company programs (what management must do for manpower training to extend the working capacity of its personnel.)

CHASE, EDWARD T. Learning to be unemployable. *Harpers Magazine,* v. 226, April 1963: 33–40.

An article critical of the vocational education programs the author claims are "fantastically biased in favor of farming and home economics" and teaching skills that are obsolete, including trade and industrial education. "We need to launch a program of practical training for real jobs in a vast national effort" is one of the solutions proposed by Mr. Chase.

CHILDS, G. B. Is the work ethic realistic in an age of automation? *Phi Delta Kappan.* v. 46, April 1962: 370–375.

In the age of automation the author believes that "our educational system must prepare people to live in a world in which work will not hold the central position it has held in the past."

CLAGUE, EWAN. The occupational outlook. *National Association of Secondary-School Principals bulletin,* v. 48, November 1964: 37–44.

The author is Commissioner of the Bureau of Labor Statistics, U.S. Department of Labor. In this article, he outlines the manpower requirements of these labor categories: the white-collar worker, the blue-collar worker, the service workers, and those in farm occupations. His analysis indicates "the most rapidly growing occupations are generally those that require the most education and training."

COE, B. D. Vocational education in the high school; area vocational schools and centers. *Theory into practice,* v. 3, December 1964: 171–174.

Contents: The new demands for vocational education, "the typical student in secondary school vocational programs, the present vocational education program in the secondary school, with the county high schools of New Jersey as an example."

COLEMAN, JAMES S. A future without jobs. *Nation,* v. 196, May 25, 1963: 440–443.

The author discusses various solutions to the problem of unemployment, particularly job training for out-of-school youth, and changes in our educational structure to keep more people in school for a longer period of time.

The coming crisis: youth without work. *The American federationist,* v. 70, April 1963: 8–15.

The economic outlook for the unemployed youth, and what dangers large scale unemployment of this segment of the population hold for American society. This article also discusses the problems of job opportunities for young people who have dropped out of school and what types of training and help they need.

CONANT, JAMES B. Vocational education and the national need. *American vocational journal,* v. 35, January 1960: 15–19.

An address delivered at the American Vocational Association convention, December 7, 1959, in Chicago, in which the present status of vocational education programs in the comprehensive high school is discussed. Recommendations for more effective programs in the future are also given.

COREY, JOHN. North Carolina's new system of vocational and technical education. *Phi Delta Kappan,* v. 46, April 1965: 383–387.

An account of vocational-technical education in North Carolina since 1957. Programs in the secondary school and the community junior college are stressed.

DAWSON, KENNETH E., and LOWELL A. BURKETT. A conversation on industrial arts and vocational education. *NEA Journal*, v. 54, November 1965: 25–28.

Officials of the American Industrial Arts Association and the American Vocational Association respectively answer questions put to them by members of the *NEA Journal* staff. The significance of industrial arts and vocational technical education is discussed.

DES MARAIS, PHILIP H. New developments in occupational training and vocational education. *Balance sheet*, v. 46, September 1964: 21–23.

An official of the U.S. Department of Health, Education, and Welfare gives a brief review here of the Federal programs which provide aid to vocational training.

DICK, ARTHUR A. The case for the self-contained technical-vocational high school. *Industrial arts and vocational education*, v. 54, May 1965: 26–29.

A discussion of the merits of the vocational-technical high school as opposed to the comprehensive high school offering vocational education as one of its many courses.

DICKERMAN, H. E. Implications of automation for vocational education. *NEA Journal*, v. 45, December 1956: 564–565.

An outline of the provisions that vocational education will have to make to keep pace with the manpower needs of our growing economy.

Disadvantaged children and the world of work. *The American child*, v. 40, November 1958. 24 pp.

A presentation of the problems of a great segment of American youth. Articles are devoted to the school dropout, the "uneducables," migrant children, children of low-income farm families, minority youth, and juvenile delinquents.

DONOVAN, JOHN C. Implications of manpower training for American education. *Phi Delta Kappan*, v. 46, April 1965: 366–369.

A summary of the aims, achievements, and potential of the manpower development and training program and related Federal efforts are given here by the former manpower administrator in the U.S. Department of Labor.

Dropouts: number one challenge to America's schools. *The American child*, v. 43, March 1961. 20 pp.

"This issue of *The American child* tells why (the dropout) is the number one challenge facing our schools and reports on four experimental programs developing techniques to meet the challenge."

DUDLEY, ARTHUR J. Automation and education. *Industrial arts and vocational education*, v. 52, April 1963: 38–40, 55.

"A detailed analysis of automation and what it implies for education, generally and industrial education, specifically."

DUNCANSON, D., editor. Educational programs for non-college-bound youth. *Teachers college journal*, v. 36, November 1964: 61–76.

The subject "Educational programs for non-college-bound youth" was the one adopted as the theme for the Third Annual Educational Development Council Spring Workshop at Indiana State College, April 2–3, 1964. This article contains four of the addresses delivered at this meeting: Bynum, Alvis S., "Too many, too soon: a commentary on the problems of youth, school, and work;" Beymer, Lawrence, "Nonsense and horse sense about dropouts;" Frantz, Welby M., "Education and industry: mutual-aid program;" Kozelka, Robert F., "Resolved: cooperative education is best."

EDDY, L. W. Meeting the challenge for technical education at the high school level. *Industrial arts and vocational education*, April 1963: 18–19.

Some "guarding principles and operating procedures" necessary for successfully training technicians at the high school level.

Education and automation: the coming world of work and leisure. *National As-*

sociation of Secondary-School Principals bulletin, v. 48, November 1964: 3–110.

Entire issue devoted to the relationship of education and automation. Pertinent articles listed here are analyzed under individual authors. General contents of issue: "The Nation, the economy and employment;" "Education, the school and the student."

Education for work and family living. *Review of educational research,* v. 18, June 1947: 210–250.

A review of the literature for the 3-year period October 1944 to October 1947, covering these topics: Education for work movement; home and family life education; industrial education; business education; agricultural education.

ELLINGTON, JOHN R. Jobs for youth: a critical problem for the 60s. *State government,* v. 34, Spring 1961: 118–123.

The author believes that one of our most serious social problems is the unemployment of our youth, who are unable to get jobs because of inadequate vocational training.

EVANS, RUPERT N. Industry and the content of industrial education. *School shop,* v. 21, April 1962: 29–31, 110.

Who shall determine the contents of courses for effective vocational-industrial education? The author believes that such decisions should be composed of a team, equally represented by the local school administration and industrial economists, psychologists, labor-management specialists, and others from industry.

FEIRER, ALBERT J. The future role of vocational-technical education in our society. *Industrial arts and vocational education,* v. 53, May 1964: 23–26, 67–68, 70.

An outline of the problems to be faced in vocational education for the 1960's, the accomplishments of some States in preparing for the new challenges ahead in training youth and adults for the world of work.

FERNANDEZ, G. Project: Vocational education. *Journal of secondary education,* v. 40, February 1965: 65–68.

Description of the organization and accomplishments of a "community classroom" vocational program designed for high school seniors in the Cupertino High School, Cupertino, Calif., during the 1964–65 academic year.

FINCH, B. Summaries of current vocational education acts. *School shop,* v. 24, June 1965: 17–19.

A useful and timely summary of the eight vocational education acts now in operation, giving appropriations for fiscal 1965, use of funds, administrative requirements, etc.

FLEEGE, URBAN H. Job training—by schools or industry? *School and society,* v. 90, summer 1962: 263–264.

Should the American public school be responsible for job-preparation to ease the unemployment of youth and adults? The author favors on-the-job training by industry, leaving for the schools the important role of educating the mind, imagination, emotions, and creative impulses of the human person.

FORKNER, HAMDEN L. Vocational business education under the Vocational Education Act of 1963. *Balance sheet,* v. 45, February 1964: 256–258.

An analysis of the Vocational Education Act of 1963 for those in the field of business education, giving specific information as to how this legislation may be utilized at State and local levels.

FREEDMAN, MARCIA. Vocational training. *The American child,* v. 42, November 1960: 9–12.

The problems of high school youth unable to go on to higher training are discussed here. How can they become employable, since much of the present high school vocational education programs are "at a fairly low skill level?"

FULLER, EDGAR. Report from Washington: Schools assigned responsibilities and funds in Manpower Development

and Training Act. *Nation's schools,* v. 69, May 1962: 106, 108.

How the provisions of the Manpower Development and Training Act of 1962 will effect vocational education, what is expected by way of reducing unemployment resulting from automation and technological changes.

GREENE, BERT I. A new concept of the high school. *School shop,* v. 24, April 1965: 46–48, 108.

The author believes that the present concept of the high school is outmoded, and he gives his reasons for this belief and states ". . . we are about to enter a new phase of education and that the Vocational Education Act of 1963 will show us the way." He proves this argument by an examination of the provisions of the act, and the possibilities it has for reconstructing the American high school.

HAMLIN, H. M. All students benefit from education for work. *Nation's schools,* v. 64, August 1959: 47–49.

The author is professor of agricultural education, University of Illinois. In this article he discusses the means by which all school activities and subjects can contribute to vocational education, and help students "face up to vocational alternatives" in choosing a life's work.

———. New designs in vocational and practical arts education. Part I: The South. *American vocational journal,* v. 39, December 1964: 12–15.

This report is the first section of a national report on new designs in vocational, technical and practical arts education, and vocational guidance, being prepared by a subcommittee of the Public Information Committee of the American Vocational Association.

HARRINGTON, GORDON M. Vocational education moving in diverse directions. *Nation's schools,* v. 60, July 1957: 45–48.

"The observations made here summarize the results of a survey made in 1953 of the State director of vocational education in each State and Territory. . . . Inferrences about trends are based on the opinions of the State level officials who are responsible for vocational programs in the schools."

HARRIS, NORMAN C. Redoubled efforts and dimly seen goals. *Phi Delta Kappan,* v. 46, April 1965: 360–365.

The author is professor of the Technical Education Center for the Study of Higher Education, University of Michigan. He states what he believes are the "hard questions" to be asked in administering the "fivefold expansion in vocational education funds" so that the program may prove successful.

HELLER, WALTER W. Men, money and materials. *Educational record,* v. 44, January 1963: 12–16.

This noted economist outlines the advantages to be reaped in investing "money and materials" on education to provide skilled manpower. He also lists eight "policy guides" for further investments in education and training to insure the achievement of greater skills from workers.

HINES, J. J. Industry needs high school graduates. *American school board journal,* v. 149, October 1964: 13–14.

Results of a survey made by three vocational education teachers in an Illinois community of 40,000 population. These teachers interviewed the personnel managers of 20 companies "to determine what terminal high school graduates should be taking to qualify for employment."

HORN, FRANCIS H. Liberal education reexamined. *Harvard educational review,* v. 26, No. 4, 1956: 303–314.

Originally given as a speech at the Andiron Club of New York City, December 16, 1955, this article by Dr. Horn of the Pratt Institute states three complaints against the attitude of the spokesmen for liberal education. One of these complaints is their failure to recognize the importance of both liberal and vocational education in our present day society.

HOWE, HAROLD, 2D. The human side of vocational education. *School shop,* v. 25, April 1966: 2.

A guest editorial by the U.S. Commissioner of Education in which he points out the "interesting changes in program and facilities" of the Vocational Education Act of 1963.

HURT, MARY L. Educating for the world of work: a team approach. *Educational leadership,* v. 22, January 1965: 221–225.

An outline of ways and means to expand academic and vocational education programs under the Vocational Education Act of 1963.

Imperative needs of youth. *National Association of Secondary-School Principals bulletin,* v. 31, March 1947: 3–144.

A discussion of 10 needs of youth, all of which have implications for industrial training. Emphasis is particularly placed on the need for developing salable skills.

IVERSEN, ROBERT W. Peace Corps training: lessons of the first year. *Educational record,* v. 44, January 1963: 17–25.

A description of the Peace Corps educational training for particular skills that might be applied to other types of vocational education. Among the "lessons" learned from this system: ". . . Highly motivated students can absorb a great deal in a relatively short time. Some training programs have, in fact, compressed the equivalent of a year of college into 12 weeks."

JACOBSON, PAUL B., ed. Youth at work; a manual containing descriptions of a number of selected National Youth Administration projects for in-and-out-of-school youth. *National Association of Secondary-School Principals bulletin,* v. 25, May 1941: 3–197.

An entire issue devoted to the work programs under the NYA. Includes information on programs for out-of-school youth which enabled them to work and still receive training through the schools to make them more productive on the job.

JOHNSON, B. LAMAR. Guideline and trends in postsecondary vocational-technical education. *Phi Delta Kappan,* v. 46, April 1965: 376–380.

Eight trends in junior college organization and education are discussed to point out the value of the junior college as an effective institution for vocational-technical training.

JONES, PAUL O. We train dropouts. *Industrial arts and vocational education,* v. 54, June 1965: 26, 43–44.

The author is the Assistant Superintendent of Vocational Education and Training, U.S. Bureau of Prisons. He describes here the training program given school dropouts in Federal correctional institutions.

KEMP, BARBARA H. The youth we haven't served. *American vocational journal,* v. 40, October 1965: 24–26.

"What can vocational educators do to compensate for long years of neglect?" This article suggests eight lines of action.

KEPPEL, FRANCIS. Big-city school: problems and prospects; new vigor in the urban high schools. *PTA magazine,* v. 59, March 1965: 4–6.

The former U.S. Commissioner of Education presents an "agenda for reform" in revitalizing the high schools in our big cities. On this "agenda" are suggestions for better training opportunities for jobs.

———. Vocational education: a promise for tomorrow. *American vocational journal,* v. 39, February 1964: 15–18.

An address by the U.S. Commissioner of Education at the 57th Annual Vocational Convention in Atlantic City, N.J., December 9, 1963. In this address Mr. Keppel emphasizes the importance of State planning as indicated in the proposals of the Vocational Education Act of 1963.

KOHLER, MARY C., and ANDRE FONTAINE. The job situation. *Saturday evening post,* v. 235, March 24, 1962: 58, 61–62.

One of the fundamental reasons why youth cannot find work is to be found in the breakdown of the apprentice system and total lack of training for work which might be available to them.

LAW, G. Area school: getting the most for the education dollar. *School shop*, v. 23, April 1964: 57–60.

A description of the Lewis Wilson Technological Center, Huntington, N.Y. Useful as a study of an area vocational school's founding and development.

LAWSON, JOHN B. Vocational preparedness for a technical age. *American vocational journal*, v. 38, September 1963: 10–12.

The author is vice president of the Philco Corporation. He believes that "we must take a good hard look at our vocational preparedness programs" and uses California as an example in planning for ways to meet the vocational needs of that State. This planning Mr. Lawson terms "Master Plan for Vocational Education," and he describes the possible impact on education and labor if it were to materialize.

LESHNER, SAUL S., and GEORGE S. SYNDERMAN. Helping unemployed youth—a community approach. *Children*, v. 8, November–December 1961: 213–217.

The authors state their views on the needs of the school dropouts, and what services and training the community can provide to aid their future.

LITTLE, J. KENNETH. The Wisconsin research center for vocational-technical education. *Phi Delta Kappan*, v. 46, April 1965: 412–413.

In October 1964, the University of Wisconsin, with the assistance of a Ford Foundation grant, established the Center for Research and Development in Vocational-Technical Education and Training. A brief description of its objectives and activities is given in this article.

LIVERIGHT, A. A. Lifelong education. *National Association of Secondary-School Principals bulletin*, v. 48, November 1964: 99–110.

The author is the director of the Center for the Study of Liberal Education for Adults at Boston University, Brookline, Mass. He outlines the important needs of adult education today. Partial contents: Educating nontechnologists about technology and preparing for continuing and accelerating change in jobs and professions.

LOCKETTE, RUTHERFORD E. Implications for industrial arts education: education for a changing world of work. *American vocational journal*, v. 39, April 1964: 26–27.

A professor of industrial education of the Trenton (N.J.) State College outlines four programs for industrial arts education at the senior high school and adult level. He believes that such programs would make vocational education available to a larger number of youths who would profit from such training.

LOGAN, W. B. Vocational education facts and misconceptions. *Theory into practice*, v. 3, December 1964: 161–162.

The author states that "in spite of the favorable record established by vocational education in 50-plus years since its inception, there are still misconceptions in the field." Among these misconceptions there are eight outstanding ones, some of which are that Federal funds bring Federal control, vocational education is limited to learning a narrow skill, that vocational education is for students of low ability, and that high school vocational education students will not be able to enter college.

LOOMIS, WILLIAM P., and LOUISE MOORE. Occupational education in the schools. *Annals of the American Academy of Political and Social Science*, v. 302, November 1955: 68–73.

"Most of the activities covered in this report concerning placement and follow-up are based upon operations of the schools in the field of trade and industrial education, which includes training for

employment in manufacturing, construction, technical, and service occupations."

LOWENS, MILTON. Needed: vocational institutes! *High points*, v. 45, November 1963: 65–76.

The author gives his reasons why he believes the vocational high schools of New York City "are obsolete and should be replaced without delay." He includes suggestions for modern programs more in keeping with current needs and believes that vocational institutes are the answer to combat obsolescence in vocational high schools.

MCCLUSKY, HOWARD Y. General education and work experience. *Review of educational research*, v. 14, October 1944: 289–300.

A review of the literature covering a 3-year period, October 1941 to October 1944, on the subject of student employment as a part of the general education curricula. Includes evaluation of research on such programs as the National Youth Administration and the Civilian Conservation Corps.

MCCOURT, OKEY E. Programed instruction in vocational-technical training. *American vocational journal*, v. 40, January 1965: 17–18.

How automated instruction was initiated in the Sussex County (Delaware) area vocational school and a brief assessment of its effectiveness.

MCLURE, WILLIAM P. The challenge of vocational and technical education. *Phi Delta Kappan*, v. 43, February 1962: 212–217.

This article is the result of a comprehensive study made on vocational education in Illinois. The subject of vocational education is treated here from a national viewpoint, re-defining it from the needs of the high school level, and placing the teaching of vocational education in a more comprehensive school. The author also suggests the "fundamental policy decision" that must be made by each State to make its vocational training programs more effective.

———. Future of vocational and technical education. *American vocational journal*, v. 36, March 1961: 7–9. Also in *National Association of Secondary-School Principals bulletin*, v. 35, February 1961: 7–12.

A professor of education at the University of Illinois discusses the demands now being made on our high schools. He believes that the future task for vocational education is one of close cooperation between the educational institution and fields of occupational employment.

MANDEL, HENRY. Fundamental considerations in vocational program planning. *American school and university*, v. 34, 1962–63: G–5–G–10.

Basic information on setting up a vocational-technical program in a typical American community. Includes advice on equipment, tools, and supplies, space requirements, and how much to spend.

Manpower Development and Training Act: The 1963 amendments. *School life*, v. 46, March–April 1964: 12–16.

A discussion of the need for changes in the MDTA program to make it more effective. Information on the eligibility requirements under the amendments is also given.

MARTIN, W. HOWARD. Dropouts and agricultural education. *Education*, v. 85, December 1964: 217–220.

How the provisions of the Vocational Education Act of 1963 provide for more flexibility in vocational agriculture and what can be done to adapt programs in agriculture for pupils "unsuited to formal schooling."

MAURER, WALLACE M., and WARREN M. MAURER. The failure of vocational education. *School and society*, v. 86, April 12, 1958: 169–170.

Written during the "post-Sputnik" reevaluation of our educational system, the authors point out the factors contributing to the failure of our vocational education programs to produce personnel "trained in the light of manpower needs."

In addition the authors claim that "funds invested in such programs serve to continue their existence despite the adverse effects upon the individuals trained and the communities served."

MOBLEY, M. D., ed. Fifty years of progress in vocational and practical arts education. *American vocational journal,* v. 31, December 1956: 1–120.

Entire issue devoted to the progress made in vocational and practical arts education for a fifty year period, including a history of Federal funds for vocational education.

———. Manpower . . . a serious national problem. *American vocational journal,* v. 38, May 1963: 8–10.

The executive secretary of the American Vocational Association explains why "more adequate and effective programs of vocational and technical education are needed" to provide work opportunities for "present and oncoming generations."

———. Review of Federal vocational-education legislation, 1862–1963. *Theory into practice,* v. 3, December 1964: 167–170.

The author is the executive secretary of the American Vocational Association. A brief summary of Federal assistance to vocational education is given, and a more detailed report of the Manpower and Training Act of 1962 and the Vocational Education Act of 1963 is included.

———. Vocational education outlook for the 60's. *American vocational journal,* v. 35, March 1960: 9–11. Also in *Overview,* v. 1, January 1960: 41–43.

A forecast of what can be expected in vocational education expansion for this decade by the executive secretary of AVA. Among Dr. Mobley's predictions are programs for adults, area programs embracing area vocational schools, comprehensive high schools with strong vocational and practical arts courses, especially in semirural areas and in large cities.

MORMAN, ROBERT R. Automation, dropouts, and guidance. *National Association of Secondary-School Principals bulletin,* v. 48, November 1964: 83–98.

Topics discussed in this article: Labor force projections and job changes within the next generation, providing effective vocational training for the out-of-school, unemployed youth, how vocational guidance will have to change to meet the demands of counseling in an automated age.

MOSS, JEROME. Universal vocational education: a vital element of public education. *Educational forum,* v. 28, November 1963: 63–70.

Vocational education as a public responsibility and its place in the secondary-school program are two aspects discussed in this article.

NEFF, MONROE C. Adult basic education in North Carolina. *Adult leadership,* v. 13, March 1965: 277–278, 305.

Activities now under way in North Carolina for adult basic education under the Economic Opportunity Act of 1964. Describes also the teacher training institutes to prepare instructors for the basic education programs, and materials used in instruction.

New developments under Vocational Educational Act—a nationwide roundup. *School shop,* v. 25, April 1966: 49–90.

A group of 13 articles by leading vocational education personnel, each article describing a phase of the Vocational Education Act of 1963 and the goals attained through it.

NOVAK, B. J., and M. E. SUNDHEIM. Careers for potential dropouts. *Education,* v. 85, December 1964: 199–205.

A review of existing programs which have been initiated to provide job training for potential school dropouts. Programs in Philadelphia, Pa., are among those discussed.

NYE, B. C., and W. B. LOGAN. Courses for upgrading the vocational skills of adults. *Theory into practice,* v. 3, December 1964: 179–182.

A discussion of the types of programs available under Federal sponsorship to train adults for a wider range of job opportunities.

OGILVIE, W. K. Occupational education and the community college. *Educational leadership,* v. 22, January 1965: 244–246+.

Examples of occupational training programs in the community colleges of various States.

O'HARA, EDWARD. The first step to employability. *American vocational journal,* v. 40, October 1965: 14–15.

General information on the Job Corps, established by the Office of Economic Opportunity to give deprived youth basic training for employment.

OLESON, E. B. Industrial-vocational education for needs of youth and adults. *South Dakota Educational Association journal,* v. 40, May 1965: 6–10.

The author is the State Director of Vocational Education in South Dakota. In this article he makes a distinction between "industrial arts" and "vocational education" by stating that "the former is a curriculum area while . . . the latter is to fit persons for useful employment in specific occupations."

OLIVE, C. THOMAS. A leadership training breakthrough for the new vocational training. *School shop,* v. 24, April 1965: 54–55.

A description of New York State's program to train top-level administrators for vocational training programs. The author states ". . . the plan is feasible and practical to apply in other States."

OLSON, JERRY C. The marriageability of vocational education. *School shop,* v. 25, October 1965: 39–42.

Description of a program initiated in the Pittsburgh, Pa., public high schools to "seek to end the separation of vocational schools and curriculums from the general academic programs."

Operations under National Apprenticeship Program. *Monthly labor review,* v. 69, August 1949: 126–130.

Brief review of the National Apprenticeship Program developed as an economic measure in the early 1930's, and its transfer to the U.S. Department of Labor in 1937. Statistics are given concerning the growth of this form of vocational training for the 1939–48 period.

PCP: a program to rehabilitate dropouts. *School management,* v. 9, August 1965: 39–41.

A new program called Personalized Curriculum Project has been initiated in Oscoda, Mich., to give high school dropouts an opportunity for work and study.

Place and role of vocational education in the total school program. *American vocational journal,* v. 40, February 1965: 33–35.

Summary of discussion by State Directors of Vocational Education at the 58th annual convention of the American Vocational Association, 1964.

PRAGAN, OTTO. Labor's stake in vocational education. *American vocational journal,* v. 40, March 1965; 13–14, 32.

Excerpts from an address delivered at the 1964 American Vocational Association convention by the assistant director of education, AFL–CIO.

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The specialist for industrial arts education, U.S. Office of Education, explains in this article how funds in the new Elementary and Secondary Education Act of 1965 may benefit industrial arts education.

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